IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:	Confirmation No.: 1642
Krisztian KISS, *et al.*	Art Unit: 2478
Application No.: 10/733,635	Examiner: Sulaiman NOORISTANY
Filed: December 12, 2003	

For: REGISTRATIONS IN A COMMUNICATION SYSTEM

MAIL STOP APPEAL BRIEF – PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF ON BEHALF OF KRISZTIAN KISS, AND GABOR BAJKO

Appellants file this Appeal Brief pursuant to 37 C.F.R. § 41.37, in support of its Notice of Appeal, dated February 9, 2011. The fees in the amount of $540 required under 37 C.F.R. § 41.20(b)(2) are being paid concurrently on the Electronic Filing System (EFS) by way of a credit card payment. Appellants believe no additional fees are due. However, the Commissioner is hereby authorized to charge any fees that may be due, or credit any overpayment of same, to deposit account 06-1050, referencing the attorney docket number shown above.

(i.) Real Party In Interest

The real party in interest in the above application is **Nokia Corporation.**

(ii.) Related Appeals and Interferences

The Appellants know of no other related cases, including any related applications, appeals or interferences, that will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

(iii.) Status of Claims

This is an appeal from the decision of the Examiner in an Office Action dated November 9, 2010, rejecting claims 1, 4-5, 7-9, 11, 20, and 26-32. The pending claims have been twice rejected. Claims 1, 4-5, 7-9, 11, 20, and 26-32 are the subject of this appeal.

(iv.) Status of Amendments

All amendments for claims 1, 4-5, 7-9, 11, 20, and 26-32 have been entered. Appellants have filed a Notice of Appeal on February 9, 2011.

(v.) Summary of Claimed Subject Matter

Background

The invention relates to communication systems, and in particular to communication systems wherein a user may register an identity from multiple locations. **[Specification, Page 1, Paragraph 1].**

Appellants' Invention

Claim 1

One aspect of Appellants' invention is set out in claim 1 as a method that includes registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user." **[Specification, pages 4-5, paragraph 13].** "The serving call session control function 12 forms an entity whereto the subscriber 10 shall be registered at. The registration is required in order to be able to request for a service from the communication system. A user may register himself via any appropriate access system, such as the shown networks 2 and 4. In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12." **[Specification, page 8, paragraphs 27-28].** "[0034] In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2." **[FIG. 2, and Specification, page 9, paragraph 32].**

FIG. 2 is a flowchart schematic illustrating operations including the operation of registering a plurality of addresses of a user at a S-CSCF.

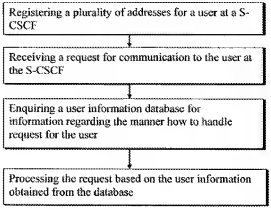

Fig. 2

A further inventive feature of Appellants' claim 1 is that the method also includes receiving, at the controller entity, a request for a communication link to the user. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user." **[Specification, pages 4-5, paragraph 13].** "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field." **[Specification, page 9, paragraph 30].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1." **[FIG. 2, and Specification, page 9, Paragraph 32].**

Another inventive feature of Appellants' claim 1 is that the method further includes querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user. The method also includes the steps of querying a user information storage for information regarding the manner regarding how to handle the request; and processing the request in accordance with the information from the user information storage." **[Specification, pages 4-5, paragraph 13].** "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field. To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information." **[Specification, page 9, paragraphs 30-31].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20. For example, the user profile 22 may be configured to indicate the following alternatives: proxy to only a single contact (no forking), proxy the request to all known addresses

at once (parallel forking), or proxy the request sequentially. In the last case the order may be randomly chosen (sequential search). In certain applications two options might be enough. For example, the options may be no forking and sequential forking. More than three options may also be used." **[FIG. 2, and Specification, pages 9-10, paragraphs 32-33].**

A further inventive feature of Appellants' claim 1 is that the method also includes processing, at the controller entity, the request based on the queried information from the database. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user. The method also includes the steps of querying a user information storage for information regarding the manner regarding how to handle the request; and processing the request in accordance with the information from the user information storage." **[Specification, pages 4-5, paragraph 13].** "To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information." **[Specification, page 9, paragraph 31].** "[0034] In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20. For example, the user profile 22 may be configured to indicate the following alternatives: proxy to only a single contact (no forking), proxy the request to all known addresses at once (parallel forking), or proxy the request sequentially. In the last case the order may be randomly chosen (sequential search). In certain applications two options might be enough. For example, the

options may be no forking and sequential forking. More than three options may also be used. The processing may occur in accordance with the information from the user information storage only if no user preference has been indicated for the known contact addresses. For example, any preference indicated by the request may overrun the information from the user information storage. Alternatively, the user information may not even be queried if the request includes a preference, or if the preference is otherwise known." **[FIG. 2, and Specification, pages 9-10, paragraphs 32-34].**

And Appellants' claim 1 includes the features of wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially. "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field. To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information. **[Specification, page 9, paragraphs 30-31].** "The processing may occur in accordance with the information from the user information storage only if no user preference has been indicated for the known contact addresses. For example, any preference indicated by the request may overrun the information from the user information storage. Alternatively, the user information may not even be queried if the request includes a preference, or if the preference is otherwise known." **[Specification, page 10, paragraph 34].**

Claim 11

An additional aspect of Appellants' invention is set out in claim 11 as an apparatus that includes at least one processor, and at least one memory. "Reference is made to FIG. 1 which shows an example of a network architecture wherein the invention may be embodied. FIG. 1 shows an IP Multimedia Network 10. IP multimedia services may be offered for IP Multimedia Network subscribers. IP Multimedia (IM) functionalities can be provided by means of a Core Network (CN) subsystem including various entities for the provision of the service. The core network (CN) entities typically include various switching and other control entities and gateways for enabling the communication via a number of radio access networks and also for interfacing a single communication system with one or more communication system such as with other cellular systems and/or fixed line communication systems. In the shown arrangement a user equipment 1 may access the IMS network 10 via two different access networks 2 and 4. The exemplifying network includes a General Packet Radio Service (GPRS) network 2 and a Wireless local area network (WLAN) 4. Each access network is provided with base stations 3 and 5, respectively. The access networks are typically controlled by at least one appropriate controllers (not shown for clarity). A controller may be assigned for each base station or a controller can control a plurality of base stations. Solutions wherein controllers are provided both in individual base stations and in the radio access network level for controlling a plurality of base stations are also known. It shall thus be appreciated that the name, location and number of the network controllers depends on the system. The base stations 2 and 5 are arranged to transmit signals to and receive signals from the mobile user equipment 1 of a mobile user i.e. subscriber via a wireless interface. Correspondingly, the mobile user equipment 1 is able to transmit signals to and receive signals from the base station via the wireless interface. The mobile user may use any appropriate mobile device adapted for Internet Protocol (IP) communication to connect the network. For example, the mobile user may access the cellular network by means of a Personal computer (PC), Personal Data Assistant (PDA), mobile station (MS) and so on. The following examples are described in the context of mobile stations. One skilled in the art is familiar with the features and operation of a typical mobile station. Thus, a detailed explanation of these features is not necessary. It is sufficient to note that the user may use the mobile station 1 for tasks such as for making and receiving phone calls, for receiving and sending data from and to

the network and for experiencing e.g., multimedia content. The mobile station may include an antenna element for wirelessly receiving and transmitting signals from and to base stations of the mobile communication network. The mobile station 1 may also be provided with a display for displaying images and other graphical information for the user of the mobile user equipment. Speaker means are also typically provided. The operation of the mobile user equipment may be controlled by means of an appropriate user interface such as control buttons, voice commands and so on. Furthermore, a mobile user equipment is provided with a processor entity and a memory means. It shall be appreciated that although only one mobile station is shown in FIG. 1 for clarity, a number of mobile stations may be in simultaneous communication with each base station of the mobile communication system." **[Specification, pages 6-7, paragraphs 20-24].**

Another inventive feature of Appellants' claim 11 is that the at least one processor and the at least one memory provide operations comprising registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user." **[Specification, pages 4-5, paragraph 13].** "The serving call session control function 12 forms an entity whereto the subscriber 10 shall be registered at. The registration is required in order to be able to request for a service from the communication system. A user may register himself via any appropriate access system, such as the shown networks 2 and 4. In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12." **[Specification, page 8, paragraphs 27-28].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2." **[FIG. 2, and Specification, page 9, paragraph 32].**

FIG. 2 is a flowchart schematic illustrating operations including the operation of registering a plurality of addresses of a user at a S-CSCF.

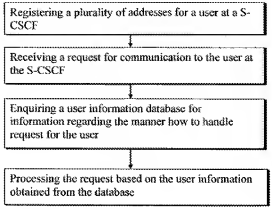

Fig. 2

A further inventive feature of Appellants' claim 11 is that the operations provided by the at least one processor and the at least one memory also include receiving, at the controller entity, a request for a communication link to the user. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user." **[Specification, pages 4-5, paragraph 13].** "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field." **[Specification, page 9, paragraph 30].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1." **[FIG. 2, and Specification, page 9, Paragraph 32].**

An additional inventive feature of Appellants' claim 11 is that the operations provided by the at least one processor and the at least one memory further include querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user. The method also includes the steps of querying a user information storage for information regarding the manner regarding how to handle the request; and processing the request in accordance with the information from the user information storage." **[Specification, pages 4-5, paragraph 13].** "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field. To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information." **[Specification, page 9, paragraphs 30-31].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20. For example, the user profile 22 may be configured to indicate the following alternatives: proxy to only a single contact (no forking), proxy the request

to all known addresses at once (parallel forking), or proxy the request sequentially. In the last case the order may be randomly chosen (sequential search). In certain applications two options might be enough. For example, the options may be no forking and sequential forking. More than three options may also be used." **[FIG. 2, and Specification, pages 9-10, paragraphs 32-33].**

Another inventive feature of Appellants' claim 11 is that the operations provided by the at least one processor and the at least one memory also include processing, at the controller entity, the request based on the queried information from the database. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user. The method also includes the steps of querying a user information storage for information regarding the manner regarding how to handle the request; and processing the request in accordance with the information from the user information storage." **[Specification, pages 4-5, paragraph 13].** "To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information." **[Specification, pages 4-5, paragraph 33].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20." **[FIG. 2, and Specification, page 9, paragraph 32].**

And Appellants' claim 11 includes the inventive features of wherein, when provided during registration, the controller entity uses user preference information to determine whether to

fork the request in parallel or sequentially. "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field. To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information. **[Specification, page 9, paragraphs 30-31].** "[0036] The processing may occur in accordance with the information from the user information storage only if no user preference has been indicated for the known contact addresses. For example, any preference indicated by the request may overrun the information from the user information storage. Alternatively, the user information may not even be queried if the request includes a preference, or if the preference is otherwise known." **[Specification, page 10, paragraph 34].**

Claim 20

A further aspect of Appellants' invention is set out in claim 20 as an apparatus that includes registration means for registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user. "In the current third generation (3G) wireless IP multimedia network architectures it is assumed that several different server entities are used for handling different functions. These include entities that handle call session control functions (CSCFs). The call session functions may be divided into various categories such as a proxy call session control function (P-CSCF), interrogating call session control function (1-CSCF), and serving call session control function (S-CSCF). For clarity, FIG. 1 shows only the S-CSCF 12. The serving call session control function 12 forms an entity whereto the subscriber 10 shall be registered at. The registration is required in order to be able to request for a service from

the communication system. A user may register himself via any appropriate access system, such as the shown networks 2 and 4. In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12." **[Specification, page 8, paragraphs 26-28].** "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user." **[Specification, pages 4-5, paragraph 13].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2." **[FIG. 2, and Specification, page 9, paragraph 32].**

FIG. 2 is a flowchart schematic illustrating operations including the operation of registering a plurality of addresses of a user at a S-CSCF.

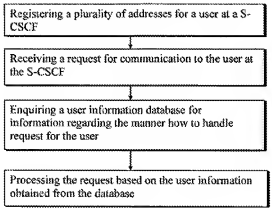

Fig. 2

A further inventive feature of Appellants' claim 20 is that the apparatus also includes interface means, at a controller entity, for interfacing to a database for storing information

regarding how to handle a request for the user. "In the current third generation (3G) wireless IP multimedia network architectures it is assumed that several different server entities are used for handling different functions. These include entities that handle call session control functions (CSCFs). The call session functions may be divided into various categories such as a proxy call session control function (P-CSCF), interrogating call session control function (1-CSCF), and serving call session control function (S-CSCF). For clarity, FIG. 1 shows only the S-CSCF 12. The serving call session control function 12 forms an entity whereto the subscriber 10 shall be registered at. The registration is required in order to be able to request for a service from the communication system. A user may register himself via any appropriate access system, such as the shown networks 2 and 4. In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12. A subscriber information storage is shown to be provided by a home subscriber server (HSS) 20. The home subscriber server (HSS) 20 is for storing subscriber i.e. user related information. The home subscriber server (HSS) can be queried by other function entities over the appropriate interfaces, e.g. during session set-up procedures. The subscriber information conventionally includes information such as authentication data (e.g. registration identities of the subscriber or the terminals) and so on. The HSS can also be used for storing permanently subscriber profile information." **[Specification, pages 8-9, paragraphs 26-29].** "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user." **[Specification, pages 4-5, paragraph 13].** "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by

using the above discussed `Request-Disposition` header field." **[Specification, page 9, paragraph 30].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1." **[FIG. 2, and Specification, page 9, paragraph 32].**

An additional inventive feature of Appellants' claim 20 is that the apparatus further includes querying means for querying, by the controller entity, the database at a home subscriber server for information regarding a manner regarding how to handle the request. "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user. The method also includes the steps of querying a user information storage for information regarding the manner regarding how to handle the request; and processing the request in accordance with the information from the user information storage." **[Specification, pages 4-5, paragraph 13].** "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field. To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information." **[Specification, page 9, paragraphs 30-31].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-

Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20. For example, the user profile 22 may be configured to indicate the following alternatives: proxy to only a single contact (no forking), proxy the request to all known addresses at once (parallel forking), or proxy the request sequentially. In the last case the order may be randomly chosen (sequential search). In certain applications two options might be enough. For example, the options may be no forking and sequential forking. More than three options may also be used." **[FIG. 2, and Specification, pages 9-10, paragraphs 32-33].**

Another inventive feature of Appellants' claim 20 is that the apparatus also includes processing means for processing, at the controller entity, the request based on the queried information from the database. "In the current third generation (3G) wireless IP multimedia network architectures it is assumed that several different server entities are used for handling different functions. These include entities that handle call session control functions (CSCFs). The call session functions may be divided into various categories such as a proxy call session control function (P-CSCF), interrogating call session control function (1-CSCF), and serving call session control function (S-CSCF). For clarity, FIG. 1 shows only the S-CSCF 12. The serving call session control function 12 forms an entity whereto the subscriber 10 shall be registered at. The registration is required in order to be able to request for a service from the communication system. A user may register himself via any appropriate access system, such as the shown networks 2 and 4. In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12." **[Specification, pages 8-9, paragraphs 26-28].** "According to one embodiment of the invention, there is provided a method in a communication system for processing incoming requests at a controller entity. The method includes the steps of registering a plurality of contact addresses for a user in the controller entity, and receiving a request at the controller entity for a communication link to the user. The method also includes the steps of querying a user information storage for information regarding the manner regarding how to

handle the request; and processing the request in accordance with the information from the user information storage." **[Specification, pages 4-5, paragraph 13].** "To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information." **[Specification, page 9, paragraph 33].** "In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20." **[FIG. 2, and Specification, page 9, paragraph 32].**

And Appellants' claim 20 includes the inventive features of wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially. "This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field. To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information. **[Specification, page 9, paragraphs 30-31].** "The processing may occur in accordance with the information from the user

information storage only if no user preference has been indicated for the known contact addresses. For example, any preference indicated by the request may overrun the information from the user information storage. Alternatively, the user information may not even be queried if the request includes a preference, or if the preference is otherwise known." **[Specification, page 10, paragraph 34].**

(vi.) Grounds of Rejection to be Reviewed on Appeal

1) Whether claims 1, 4-5, 7-9, 11, 20, 23, 26-32 are obvious over U.S. Patent Publication No. 2002/0147845 to Sanchez *et al.* in view of the non-patent literature "Caller Preferences and Callee Capabilities for the Session Initiation Protocol (SIP)," by Rosenberg *et al.*

(vii.) Argument

Obviousness

"It is well established that the burden is on the PTO to establish a prima facie showing of obviousness, *In re Fritsch*, 972 F.2d. 1260, 23 U.S.P.Q.2d 1780 (C.C.P.A., 1972)."

The Supreme Court stated in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-1, 82 USPQ2d 1386, 1385 (2007):

> The principles underlying these cases are instructive **when the question is whether a patent claiming the combination of elements of prior art is obvious**. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* and *Anderson's-Black Rock* are illustrative—**a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.**
>
> Following these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement. **Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having 1741*1741 ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.** To facilitate review, this analysis should be made explicit. See *In re Kahn,* 441 F.3d 977, 988 (C.A.Fed.2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

(Emphasis added)

Additionally, as stated in MPEP 2143.03:

2143.03 All Claim Limitations Must Be **>Considered< [R-6]

** "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

>I. < INDEFINITE LIMITATIONS MUST BE CONSIDERED

A claim limitation which is considered indefinite cannot be disregarded. If a claim is subject to more than one interpretation, at least one of which would render the claim unpatentable over the prior art, the examiner should reject the claim as indefinite under 35 U.S.C. 112, second paragraph (see MPEP § 706.03(d)) and should reject the claim over the prior art based on the interpretation of the claim that renders the prior art applicable. *Ex parte Ionescu*, 222 USPQ 537 (Bd. Pat. App. & Inter. 1984) (Claims on appeal were rejected on indefiniteness grounds only; the rejection was reversed and the case remanded to the examiner for consideration of pertinent prior art.). Compare *In re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970) (if no reasonably definite meaning can be ascribed to certain claim language, the claim is indefinite, not obvious) and *In re Steele*, 305 F.2d 859,134 USPQ 292 (CCPA 1962) (it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions).

>II. < LIMITATIONS WHICH DO NOT FIND SUPPORT IN THE ORIGINAL SPECIFICATION MUST BE CONSIDERED

When evaluating claims for obviousness under 35 U.S.C. 103, all the limitations of the claims must be considered and given weight, including limitations which do not find support in the specification as originally filed (i.e., new matter). *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d 453 (Fed. Cir. 1984) (Claim to a catalyst expressly excluded the presence of sulfur, halogen, uranium, and a combination of vanadium and phosphorous. Although the negative limitations excluding these elements did not appear in the specification as filed, it was error to disregard these limitations when determining whether the claimed invention would have been obvious in view of the prior art.).

(Emphasis in the original)

Thus, to establish a case of obviousness, the Examiner needs to identify in the prior art all the elements of the claim being rejected, and articulate a reason to combine the known elements of the prior art in the manner claimed.

In *KSR*, the Supreme Court rejected the "rigid" teaching suggestion motivation (TSM) requirement applied by the Federal Circuit, since the Court's obviousness decisions had all advocated a flexible and functional approach that cautioned against "granting a patent based on the combination of elements found in the prior art." With respect to the genesis of the TSM requirement, the Court noted that although "[a]s is clear from cases such as *Adams*[1], a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, ***it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does***. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known," *KSR*, 127 S. Ct. 1727 at 1741.

In application of the TSM requirement, the Court cautioned that: "Helpful insights, however, need not become rigid and mandatory formulas; and when it is so applied, the TSM test is incompatible with our precedents," *KSR*, 127 S. Ct. 1727 at 1741.

Courts have also indicated, in relation to obviousness-based rejections, that:

- The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).
- "The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and

[1] *United States v. Adams*, 383 U. S. 39, 40 (1966)

thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

- "The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

Furthermore, as explained by MPEP 2143.01(V), a *prima facie* case of obviousness cannot be established if the combination renders the prior art reference(s) being modified unsatisfactory for its intended purpose:

> "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) (Claimed device was a blood filter assembly for use during medical procedures wherein both the inlet and outlet for the blood were located at the bottom end of the filter assembly, and wherein a gas vent was present at the top of the filter assembly. The prior art reference taught a liquid strainer for removing dirt and water from gasoline and other light oils wherein the inlet and outlet were at the top of the device, and wherein a pet-cock (stopcock) was located at the bottom of the device for periodically removing the collected dirt and water. The reference further taught that the separation is assisted by gravity. The Board concluded the claims were *prima facie* obvious, reasoning that it would have been obvious to turn the reference device upside down. The court reversed, finding that if the prior art device was turned upside down it would be inoperable for its intended purpose because the gasoline to be filtered would be trapped at the top, the water and heavier oils sought to be separated would flow out of the outlet instead of the purified gasoline, and the screen would become clogged."

Additionally, as further explained in MPEP 2143.01(VI), a *prima facie* case of obviousness cannot be established if the combination changes the principle of operation of the prior art reference(s) being modified:

> "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA

1959) (Claims were directed to an oil seal comprising a bore engaging portion with outwardly biased resilient spring fingers inserted in a resilient sealing member. The primary reference relied upon in a rejection based on a combination of references disclosed an oil seal wherein the bore engaging portion was reinforced by a cylindrical sheet metal casing. Patentee taught the device required rigidity for operation, whereas the claimed invention required resiliency. The court reversed the rejection holding the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." 270 F.2d at 813, 123 USPQ at 352.)."

(1) Claims 1, 4-5, 11, 20, 26-27, and 29-32 are patentable over the cited art.

For the purposes of this appeal only, claims 1, 4-5, 11, 20, 26-27, and 29-32 stand or fall together. Claim 1 is representative of this group of claims.

(A) The prior art fails to disclose the features of "wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially."

Independent claim 1 recites "a method, comprising: registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user; receiving, at the controller entity, a request for a communication link to the user; querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request; and processing, at the controller entity, the request based on the queried information from the database, wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially."

Thus, in some embodiments, for a user (a called party) that has a plurality of contact addresses, determining which contact address the user may be at may be performed by proxying a call request (from a calling party) to a single user address at a time (i.e., no forking), or proxying the request to multiple contact addresses of the user (i.e., parallel forking). In situations where the ***user (i.e., the called party)*** provided preference information at the time of registration on what proxying procedure is to be performed (parallel forking, or no forking), that information is used to handle the call request processing.

> [0028] In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12.

[0029] A subscriber information storage is shown to be provided by a home subscriber server (HSS) 20. The home subscriber server (HSS) 20 is for storing subscriber i.e. user related information. The home subscriber server (HSS) can be queried by other function entities over the appropriate interfaces, e.g. during session set-up procedures. The subscriber information conventionally includes information such as authentication data (e.g. registration identities of the subscriber or the terminals) and so on. The HSS can also be used for storing permanently subscriber profile information.

[0030] This example of the invention relates to call set-up procedures when user 6 tries to make a call to the mobile user 1 who has multiple registrations at the serving call state control function 12. It may occur that the called user 2 has not indicated to the S-CSCF 12 any preferences for forking of incoming requests via its registration, for example by using the q values. The calling user 6 has not indicated any preferences either, for example by using the above discussed `Request-Disposition` header field.

[0031] To avoid an undefined situation, the user profile 22 stored in the subscriber information storage 20 contains information regarding how the incoming requests shall be handled. The implementation of the use of this information may be similar to the fork-directive and the parallel-directive as described above. The operator of the HSS 20 is preferably able to provision the information stored in the HSS. The operator is also preferably able to modify the statically stored information.

[0032] In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20.

(Specification, pages 8-9, paragraphs 28-32).

In rejecting independent claim 1, the Examiner admitted "[h]owever, Sanchez does not explicitly disclose the terms *"the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially"* (Emphasis in the original, Office Action, page 3). Indeed, Sanchez, which is directed to a method and apparatus for networks which enable the appropriate server to be found for providing a specific user with a specific service

(Sanchez, page 1, paragraph 3), does not discuss sequential request processing (i.e., no forking) or parallel request processing (parallel forking).

The Examiner, however, relied on Rosenberg as allegedly disclosing the feature of using user preference information to determine whether to fork the request in parallel or sequentially, and stated:

> `ROSENBERG teaches that it is well known to have system wherein **`processing, at the controller entity, wherein when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially'** is met here by ROSENBERG (page. 6-8, Overview of Operation, Para. 4. Extracting Implicit Preferences, e.g., when a caller sends a request, it can optionally include new header fields which request certain handling at a server. These preferences fall into two categories. The first category, called request handling preferences, are carried in the Request-Disposition header field. They describe specific behavior that is desired at a server. Request handling preferences include whether the caller wishes the server to proxy or redirect, and whether sequential or parallel search is desired. These preferences can be applied at every proxy or redirect server on the call signaling path) in order to make the system efficient.
>
> (Emphasis in the original, Office Action, page 4).

The Examiner's characterization of the art relied upon, and the Examiner's arguments in relation to the rejection of claim 1, are incorrect.

Rosenberg is directed to a set of extensions to the Session Initiation Protocol (SIP) which allow ***a caller*** to express preferences about request handling in servers (Rosenberg, Abstract). Rosenberg describes that the extension defines a set of additional parameters to the Contact header field, called feature parameters, and that when a User Agent (UA) registers, it places these parameters in the Contact header field value to provide a feature set for a URI it is registering. Rosenberg further describes that a proxy can use this feature set to route requests based on ***caller*** preferences, and explains that when a caller sends a request, it can optionally include new header fields which request certain handling at a server, and define the ***caller's*** handling preferences.

4 Overview of Operation

This extension defines a set of additional parameters to the Contact header field, called feature parameters. Each parameter name is an encoded feature tag, as defined in RFC 2703 [23], that defines a capability for the UA associated with the Contact header field value. For example, there is a parameter for the SIP methods supported by the UA. Each feature parameter has a value; that value is the set of feature values for that feature tag. Put together, all of the feature parameters specify a feature set that is supported by the UA associated with that Contact header field value.

When a UA registers, it places these parameters in the Contact header field value to provide a feature set for a URI it is registering. The feature parameters are also mirrored in the Contact header field in a REGISTER response. ***The proxy can use this feature set to route requests based on caller preferences.*** Furthermore, Contact header fields in requests and responses that establish a dialog can contain these parameters. That allows a UA in a dialog to indicate its feature set to its peer. For example, by including the "msgserver" feature tag with value "TRUE" in the 200 OK to an INVITE, the UAS can indicate to the UAC that it is a voicemail server. This information is useful for user interfaces, as well as automated call handling.

When a caller sends a request, it can optionally include new header fields which request certain handling at a server. These preferences fall into two categories. The first category, called request handling preferences, are carried in the Request-Disposition header field. They describe specific behavior that is desired at a server. Request handling preferences include whether the caller wishes the server to proxy or redirect, and whether sequential or parallel search is desired. These preferences can be applied at every proxy or redirect server on the call signaling path.

The second category of preferences, called feature preferences, are carried in the Accept-Contact and Reject-Contact header fields. These header fields also contain feature sets, represented by the same feature parameters that are used in the Contact header field. Here, the feature parameters represent the caller's preferences. The Accept-Contact header field contains feature sets that describe UAs that the caller would like to reach. The Reject-Contact header field contains feature sets which, if matched by a UA, imply that the request should not be routed to that UA.

Proxies use the information in the Accept-Contact and Reject-Contact header fields to select amongst contacts in their target set. When neither of those header fields are present, the proxy computes implicit preferences from the request. These are caller preferences that are not explicitly placed

> into the request, but can be inferred from the presence of other message components. As an example, if the request method is INVITE, this is an implicit preference to route the call to a UA that supports the INVITE method.
>
> (Emphasis added, Rosenberg, pages 8-9)

If the proxy did not find any explicit preferences in the request (from the caller), the proxy extracts implicit preferences implied by the presence of other information in the request (Rosenberg, page 19).

Rosenberg additionally describes that the Request-Disposition header field, specifying the caller's preferences, includes a list of tokens that each specifies a particular directive, with one of those directives being a fork-directive:

> The Request-Disposition header field specifies caller preferences for how a server should process a request. Its value is a list of tokens, each of which specifies a particular directive. Its syntax is specified in Section 10. Note that a compact form, using the letter d, has been defined. The directives are grouped into types. There can only be one directive of each type per request (i.e., you can't have both "proxy" and "redirect" in the same Request-Disposition header field). When the caller specifies a directive, the server SHOULD honor that directive.
>
> The following types of directives are defined:
>
> ...
>
> > fork-directive: This type of directive indicates whether a proxy should fork a request ("fork"), or proxy to only a single address ("no-fork"). If the server is requested not to fork, the server SHOULD proxy the request to the "best" address (generally the one with the highest q-value). The directive is ignored if "redirect" has been requested.
>
> (Rosenberg, pages 29-30)

Thus, while Rosenberg describes that a proxy can use a feature set to route requests based on caller preferences, and that the ***caller's preferences*** may include a fork directive indicating how a proxy should fork a request, Rosenberg does ***not*** describe that preferences of a called user

(i.e., the party to whom the caller's call request is to be sent) are used to determine the manner of forking the request. Accordingly, contrary to the Examiner's contentions, Rosenberg too fails to disclose or suggest at least the features of "wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially," as recited in independent claim 1.

Appellants also note that claim 1 recites "receiving, at the controller entity, a request for a communication link to the **user**," and, thus, the "user" referred to in claim is the destination or target (i.e., called) party, and accordingly, the language of "user preference information" unambiguously refers to preference information of the party being called, **not** the calling party.

Because neither Sanchez nor Rosenberg disclose or suggest, alone or in combination, at least the features of "wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially," for this reason alone, Appellants' independent claim 1 is therefore allowable over the cited art, and the rejection under 35 U.S.C. §103(a) of this claim should be withdrawn.

(B) The prior art fails to disclose the features of "registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user."

Independent claim 1 recites "a method, comprising: registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user."

Thus, as noted above, in some embodiments, a user (a called party) may register, in a controller entity that includes a CSCF, a plurality of contact addresses to which a subsequent call request (from a calling user) may be routed. For example, the Specification states:

> [0028] In FIG. 1 the user 1 is shown to have a plurality of contacts 7 registered at the controller entity 12. More particularly, contact addresses `contact 1 (q1)` to `contact x (qx)` are provided via the GPRS network 2. Contact addresses `contact 2 (q2)` to `contact y (qy)` are provided via the WLAN network 4. All these contact are registered at the contact register 14 of the controller entity 12.

(Specification, page 8, paragraphs 28).

In rejecting independent claim 1, the Examiner stated:

> **Regarding claim 1,** Sanchez teaches wherein a method comprising: **registering, in a controller entity comprising a call state control function** is met here by Sanchez ([0047; 0062-0063, 0066] e.g., the CSCF (Service Requester Node) receives a REGISTER request (S-10)), **a plurality of contact addresses for a user** is met here by Sanchez ([0011] e.g., plurality of user identifiers under different service environments).
>
> (Emphasis in the original, Office Action, pages 2-3).

The Examiner's characterization of the art relied upon, and the Examiner's arguments in relation to the rejection of claim 1, are incorrect.

As noted, Sanchez is directed to a method and apparatus for networks which enable the appropriate server to be found for providing a specific user with a specific service, without restricting the types of identifications which may be used for both the user and the server providing the service (Sanchez, page 1, paragraph 3). Sanchez explains that a User Distribution Server (UDS) includes a plurality of user identifiers for identifying a user under different service environments, and further explains that the UDS responds to a query pertaining to a specific user by redirecting the query to the appropriate server or serving entity, in a network having multiple servers. Specifically:

> [0011] Embodiments of the present invention solve the problem discussed above by placing a user identification distributor accessible to an entity disposed to request user information. The distributor, or User Distribution Server (UDS) comprises a plurality of user identifiers per subscriber basis that are intended for identifying a user under different service environments. The UDS responds to a query pertaining to a specific user by redirecting the query to the appropriate server or serving entity, in a network having multiple servers. It is to be understood that "redirecting" in this context means answering the query with a server identifier, for the requester node issuing a new query towards the server. The UDS implements a secondary database with user and server identification information obtained from primary user databases, and is arranged for

> determining a specific network server in charge of a given user under a particular service environment. These specific network servers are considered primary databases wherein subscribers, or more specifically, user data under particular service environment, are distributed. Thus, the UDS acts as a secondary database comprising means for recovering user identifiers and necessary service data from the specific network servers acting as primary databases as well as from other UDS in the network resolution domain. The UDS also comprise storage for user identifiers and necessary service data, if any, per specific network server.
>
> (Sanchez, pages 1-2, paragraph 11).

Sanchez also describes that the UDS acts as a secondary database into which user identifiers (and other necessary service data) are downloaded from servers acting as primary databases.

> [0024] In accordance with an aspect of the present invention, a User Distribution Server (hereinafter UDS) is provided in a network resolution domain for receiving service request related queries for specific users in particular service environments. The UDS is arranged for acting as a secondary database that comprises a plurality of user identifiers on a per subscriber basis, each user identifier applicable in a particular service environment and associated with a server identifier addressing the particular server currently in charge of corresponding user data. These particular servers are arranged for acting as primary databases from which user identifiers and necessary service data are downloaded into the UDS acting as secondary database. The UDS answers a service request related query for a specific user to any service requester node by providing the server identifier to further address the particular server currently serving the user in the applicable service environment.
>
> (Sanchez, page 2, paragraph 24).

Thus, while Sanchez' UDS enables storing multiple identifiers, Sanchez does not describe that such multiple user identifiers are **registered** at the UDS.

Accordingly, for this reason alone, Sanchez fails to disclose or suggest at least the features of "registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user," as recited in Appellants' independent claim 1.

With respect to the Examiner's reference to paragraphs 47, 62-63 and 66 of Sanchez as allegedly disclosing the feature of claim 1 pertaining to "registering." Sanchez' paragraph 62, for example, provides as follows:

> [0062] An aspect of particular interest is the optimal behaviour of an UDS according to the invention acting as an SLF and thus inter-working with the CSCF during the Registration phase. The explanations following this are aimed with reference to interfaces and entities in FIG. 1. First, the CSCF (Service Requester Node) receives a REGISTER request (S-10) and must initiate a query for the location of the subscriber's data. Second, the CSCF sends an operation SLF_QUERY_like (S-20) to the SLF (UDS-1) and includes the subscriber identity as stated in the REGISTER request. The protocol to use is not significant at this point since the UDS according to the invention may be equipped with a plurality of Protocol Handler Modules (PHM), as shown in FIG. 3A, in a manner such as being appropriate for communicating with DNS, DIAMETER, RADIUS or any other suitable protocol. Moreover, the aforementioned Protocol Adaptation Entity 32 in FIG. 3B may be interposed between the CSCF and the UDS to this end. Third, and still with reference to FIG. 1, the SLF (UDS-1) looks up its own database contents as shown in FIG. 2 by way of example for the queried subscriber identity. Fourth, and again with reference to FIG. 1, the SLF (UDS-1) answers (S-30) with the HSS name in which the subscriber's data can be found. Fifth, the CSCF preferably launches a query directly to the HSS (Server-3) (S-40). Alternatively to the fifth step above and under certain call premises, the CSCF (Service Requester Node 28) may proceed by returning the query result (S-45) to the External Client 26 having issued the Registration request, for said External Client querying (S-50) the appropriate HSS (Server-3).
>
> (Sanchez, pages 5-6, paragraph 62).

As shown in Sanchez' FIG. 1, the REGISTER request (S-10) is sent from an external client 26 to a Service Requester Node 28 to, presumably, register the external client. Sanchez, however, does not describe registering a plurality of contact addresses for a particular user.

Accordingly, for this reason too, Sanchez fails to disclose or suggest at least the features of "registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user," as recited in Appellants' independent claim 1.

Rosenberg fails to cure the deficiencies of Sanchez as they pertain to the features of "registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user."

Because neither Sanchez nor Rosenberg disclose or suggest, alone or in combination, at least the features of "registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user," for this additional reason, Appellants' independent claim 1 is therefore allowable over the cited art, and the rejection under 35 U.S.C. §103(a) of this claim should be withdrawn.

(C) The prior art fails to disclose the features of "querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request."

Independent claim 1 recites "a method, comprising: registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user; receiving, at the controller entity, ***a request for a communication link to the user***; querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request" (emphasis added).

Thus, in some embodiments, the controller entity queries a database at a HSS for information regarding the manner in which the ***request for the communication link to the user*** is to be handled. As explained in the Specification:

> [0032] In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20.
>
> (Specification, page 9, paragraph 32).

In rejecting independent claim 1, the Examiner stated:

> **querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request** is met here by Sanchez ([0062] e.g., the CSCF preferably launches a query directly to the HSS (Server-3) (S-40));
>
> (Emphasis in the original, Office Action, page 3).

The Examiner's characterization of the art relied upon, and the Examiner's arguments in relation to the rejection of claim 1, are incorrect.

Sanchez' paragraph 62, which the Examiner alleges discloses the feature of "querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request, provides:

> [0062] An aspect of particular interest is the optimal behaviour of an UDS according to the invention acting as an SLF and thus inter-working with the CSCF during the Registration phase. The explanations following this are aimed with reference to interfaces and entities in FIG. 1. First, the CSCF (Service Requester Node) receives a REGISTER request (S-10) and must initiate a query for the location of the subscriber's data. Second, the CSCF sends an operation SLF_QUERY_like (S-20) to the SLF (UDS-1) and includes the subscriber identity as stated in the REGISTER request. The protocol to use is not significant at this point since the UDS according to the invention may be equipped with a plurality of Protocol Handler Modules (PHM), as shown in FIG. 3A, in a manner such as being appropriate for communicating with DNS, DIAMETER, RADIUS or any other suitable protocol. Moreover, the aforementioned Protocol Adaptation Entity 32 in FIG. 3B may be interposed between the CSCF and the UDS to this end. Third, and still with reference to FIG. 1, the SLF (UDS-1) looks up its own database contents as shown in FIG. 2 by way of example for the queried subscriber identity. Fourth, and again with reference to FIG. 1, the SLF (UDS-1) answers (S-30) with the HSS name in which the subscriber's data can be found. Fifth, the CSCF preferably launches a query directly to the HSS (Server-3) (S-40). Alternatively to the fifth step above and under certain call premises, the CSCF (Service Requester Node 28) may proceed by returning the query result (S-45) to the External Client 26 having issued the Registration request, for said External Client querying (S-50) the appropriate HSS (Server-3).

(Sanchez, pages 5-6, paragraph 62).

While this paragraph describes, as noted by the Examiner, that "the CSCF preferably launches a query directly to the HSS (Server-3) (S-40)," Sanchez does not describe, in this paragraph or elsewhere, that a query sent by Sanchez' CSCF to the HSS is a query to get information regarding the manner on how to handle the request for a communication link to a user.

Accordingly, contrary to the Examiner's contentions, Sanchez fails to disclose or suggest at least the features of "querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request," as recited in Appellants' claim 1.

Rosenberg fails to cure the deficiencies of Sanchez as they pertain to the features of "querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request."

Because neither Sanchez nor Rosenberg disclose or suggest, alone or in combination, at least the features of "querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request," for this additional reason, Appellants' independent claim 1 is therefore allowable over the cited art, and the rejection under 35 U.S.C. §103(a) of this claim should be withdrawn.

(D) Sanchez cannot be combined with Rosenberg.

In rejecting claim 1, the Examiner argued as follows:

> `ROSENBERG teaches that it is well known to have system wherein **`processing, at the controller entity, wherein when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially'** is met here by ROSENBERG (page. 6-8, Overview of Operation, Para. 4. Extracting Implicit Preferences, e.g., when a caller sends a request, it can

> optionally include new header fields which request certain handling at a server. These preferences fall into two categories. The first category, called request handling preferences, are carried in the Request-Disposition header field. They describe specific behavior that is desired at a server. Request handling preferences include whether the caller wishes the server to proxy or redirect, and whether sequential or parallel search is desired. These preferences can be applied at every proxy or redirect server on the call signaling path) in order to make the system efficient. Thus it would have been obvious to one ordinary skill in the art to modify Sanchez invention by utilizing a system in which the called party to be able to manipulate callers request and redirect the responses back based on the callers request or preferences.
>
> (Emphasis in the original, Office Action, page 4).

The Examiner's contentions that it would have been obvious to modify Sanchez (based on the teachings of Rosenberg) are incorrect.

As noted, Rosenberg describes a proxy that can use a feature set to route requests based on caller preferences, and further describes that the caller's preferences may include a fork directive indicating how a proxy should fork a request.

As further noted above, Sanchez is directed to a method and apparatus for networks which enable the appropriate server to be found for providing a specific user with a specific service, where a UDS responds to a query pertaining to a specific user by redirecting the query to the appropriate server or serving entity, in a network having multiple servers.

> [0011] Embodiments of the present invention solve the problem discussed above by placing a user identification distributor accessible to an entity disposed to request user information. The distributor, or User Distribution Server (UDS) comprises a plurality of user identifiers per subscriber basis that are intended for identifying a user under different service environments. The UDS responds to a query pertaining to a specific user by redirecting the query to the appropriate server or serving entity, in a network having multiple servers. It is to be understood that "redirecting" in this context means answering the query with a server identifier, for the requester node issuing a new query towards the server. The UDS implements a secondary database with user and server identification information obtained from primary user databases, and is arranged for

> determining a specific network server in charge of a given user under a particular service environment. These specific network servers are considered primary databases wherein subscribers, or more specifically, user data under particular service environment, are distributed. Thus, the UDS acts as a secondary database comprising means for recovering user identifiers and necessary service data from the specific network servers acting as primary databases as well as from other UDS in the network resolution domain. The UDS also comprise storage for user identifiers and necessary service data, if any, per specific network server.
>
> (Sanchez, pages 1-2, paragraph 11).

Thus, because Sanchez' apparatus can determine the appropriate server/serving entity to which the query is to be re-directed, Sanchez, therefore, does not need to perform a sequential or parallel forking operations to identify the server, from the various servers or server entities, to which the query is to be re-directed.

Accordingly, to modify Sanchez using Rosenberg so that the modified teachings would be one "in which the called party to be able to manipulate callers request and redirect the responses back based on the callers request or preferences" (as argued by the Examiner at page 4 of the Office Action) so as to determine whether to fork the request in parallel or sequentially to multiple servers (corresponding to multiple contact addresses) would change Sanchez' principle of operation of redirecting the query to the appropriate server or serving entity. Such a modification would also render Sanchez unsatisfactory for its intended purpose.

Accordingly, Appellants contend that the Examiner failed to establish a prima *facie case* of obviousness, and that for this reason too independent claim 1 is therefore allowable over the cited art, and the rejection under 35 U.S.C. §103(a) of the claim should be withdrawn.

(E) Conclusion.

For the foregoing reasons, Appellants' independent claim 1, and claims 4-5 and 31-32, which depend from independent claim 1, are allowable over the cited art, and the Examiner's rejection of those claims should be withdrawn. Appellants' independent claims 11 and 20 recite features similar to those recited in claim 1, and, therefore, Appellants' independent claims 11 and

20, as well as claims 26-27 and 29-30 (which depend from independent claim 11) are allowable over the cited art for reasons similar to those provided with respect to independent claim 1, and the Examiner's rejection of those claims should be withdrawn.

(2) Claims 7 and 28 are patentable over the cited art.

For the purposes of this appeal only, claims 7, and 28 stand or fall together. Claim 7 is representative of this group of claims.

As noted, the Examiner rejected claim 7 as rendered obvious over Sanchez in view of Rosenberg. Claim 7, which depends from claim 1, recites "wherein the querying comprises applying a query to a sub-group of known contact addresses."

As explained above in relation to claim 1's feature of "querying", in some embodiments, the controller entity queries a database at a HSS for information regarding the manner in which the request for the communication link to the user is to be handled. Thus, in some embodiments of claim 7, querying the database at the HSS to determine the manner for handling a request for a communication link to a user may include applying such querying only to a sub-group of the plurality of contact addresses for the user.

> [0032] In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the 'Request-Disposition' header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20.
>
> [0033] For example, the user profile 22 may be configured to indicate the following alternatives: proxy to only a single contact (no forking), proxy the request to all known addresses at once (parallel forking), or proxy the request sequentially. In the last case the order may be randomly chosen (sequential search). In certain applications two options might be enough.

> For example, the options may be no forking and sequential forking. More than three options may also be used.
>
> [0034] The processing may occur in accordance with the information from the user information storage only if no user preference has been indicated for the known contact addresses. For example, any preference indicated by the request may overrun the information from the user information storage. Alternatively, the user information may not even be queried if the request includes a preference, or if the preference is otherwise known.
>
> [0035] The query may only be applied to a sub-group of the known contact addresses. For example, the sub-group may include the WLAN or GPRS addresses in FIG. 1.
>
> (Specification, pages 9-10, paragraphs 32-35).

In rejecting Appellants' claim 7, the Examiner contended that:

> **Regarding claim 7,** Sanchez and ROSENBERG, together taught the method as in claim 1 above. Sanchez further teaches wherein the querying comprises applying a query to a sub-group of the known contact addresses (Sanchez: [0045] e.g., a UDS arranged for acting as an SLF comprises at least one Protocol Handler module for handling the received and answered queries from and to the CSCF node; ROSENBERG: user plurality addresses [0002-0010]).
>
> (Emphasis in the original, Office Action, page 5).

As explained above in relation to the Examiner's contentions that Sanchez discloses the features pertaining to "querying" as recited in claim 1, Sanchez does not describe that a query sent by Sanchez' CSCF to the HSS is a query to get information regarding the manner on how to handle the request for a communication link to a user. Rather, all Sanchez discloses is that "the CSCF preferably launches a query directly to the HSS (Server-3) (S-40)" (Sanchez, pages 5-6, paragraph 62). Thus, because Sanchez does not disclose that a query sent to the HSS to determine the manner of handling a request for a communication link to a user, Sanchez, therefore, cannot and does not disclose that querying includes applying a query to a sub-group of known contact addresses of the user that the calling party is requesting a communication link to.

Accordingly, Sanchez fails to disclose or suggest at least the features of "wherein the querying comprises applying a query to a sub-group of known contact addresses," as recited in Appellants' claim 7.

Furthermore, the passage in Sanchez referred to by the Examiner in the Examiner's rejection of claim 7 provide as follows:

> [0045] Therefore, a UDS arranged for acting as an SLF comprises at least one Protocol Handler module for handling the received and answered queries from and to the CSCF node. Moreover, provided that the protocol suitable for communication between SLF and HSS is other than the one between SLF and CSCF, the UDS arranged for acting as an SLF comprises another Protocol Handler Module (PHM) for handling updates or downloads with the HSS. As already mentioned, a Protocol Discriminator Module (PDM) is included in a UDS where more than one PHM is used.
>
> (Sanchez, page 5, paragraph 45).

Contrary to the Examiner's contentions, nothing in the above passage describes applying a query (e.g., to get information on the manner of handling a request for a communication link to a user) to a sub-group of known contact addresses.

Accordingly, for this reason too, Sanchez fails to disclose or suggest at least the features of "wherein the querying comprises applying a query to a sub-group of known contact addresses," as recited in Appellants' claim 7, and Rosenberg fails to cure the deficiencies of Sanchez as they relate to the teachings of this feature.

Because none of the references discloses or suggests, alone or in combination, at least the features of "wherein the querying comprises applying a query to a sub-group of known contact addresses," claim 7 is allowable over the cited art, and the Examiner's rejection under 35 U.S.C. §103(a) of this claim should be withdrawn.

Appellants' claim 28 recite features similar to those recited in claim 7, and, therefore, claim 28 is allowable over the cited art for at least reasons similar to those provided with respect to claim 7, and the Examiner's rejection of claim 28 under 35 U.S.C. §103(a) should be withdrawn.

(3) Claims 8 and 9 are patentable over the cited art.

For the purposes of this appeal only, claims 8 and 9 stand or fall together. Claim 8 is representative of this group of claims.

As noted, the Examiner rejected claim 8 as rendered obvious over Sanchez in view of Rosenberg. Claim 8, which depends from claim 1, recites "further comprising indicating and assigning handling instructions for at least one contact address independently during registration of the at least one contact address."

Thus, in some embodiments of claim 8, different contact addresses may be independently assigned handling instructions such that, in some implementations, one contact address of a user (being called) may have one set of handling instructions, and another contact address for that user may have other, different, handling instructions.

> [0032] In the operation, a plurality of addresses for a user may be registered at a S-CSCF 12 at step 30 of FIG. 2. An incoming request may arrive at step 31 to the S-CSCF 12 to be terminated for the mobile user 1. The user 1 has not indicated any q values via registration to the S-CSCF 12. Neither does the incoming request have any preferences of the caller, for example by means of the `Request-Disposition` header field. In such situation the S-CSCF 12 may query a user information database at step 32. The request may then be processed at step 33 in accordance with the user profile 22 stored in the HSS 20.
>
> [0033] For example, the user profile 22 may be configured to indicate the following alternatives: proxy to only a single contact (no forking), proxy the request to all known addresses at once (parallel forking), or proxy the request sequentially. In the last case the order may be randomly chosen (sequential search). In certain applications two options might be enough. For example, the options may be no forking and sequential forking. More than three options may also be used.
>
> [0034] The processing may occur in accordance with the information from the user information storage only if no user preference has been indicated for the known contact addresses. For example, any preference indicated by the request may overrun the information from the user information storage. Alternatively, the user information may not even be queried if the request includes a preference, or if the preference is otherwise known.

> [0035] The query may only be applied to a sub-group of the known contact addresses. For example, the sub-group may include the WLAN or GPRS addresses in FIG. 1.
>
> [0036] Handling instructions may be indicated and assigned for each contact address independently during their registration at the controller entity 12. The handling instructions may be indicated and assigned for each contact address by the user equipment 1 or the user information storage.
>
> (Specification, pages 9-10, paragraphs 32-36).

In rejecting Appellants' claim 8, the Examiner contended that:

> **Regarding claim 8,** Sanchez and ROSENBERG, together taught the method as in claim 1 above, as described above. Sanchez further teaches wherein indicating and assigning handling instructions for at least one contact address independently during registration of the at least one contact address (Sanchez: [0011] e.g., plurality of user identifiers under different service environments; ROSENBERG: user plurality addresses [0002-0010]).
>
> (Emphasis in the original, Office Action, page 5).

The passage in Sanchez referred to by the Examiner in the Examiner's rejection of claim 8 provide as follows:

> [0011] Embodiments of the present invention solve the problem discussed above by placing a user identification distributor accessible to an entity disposed to request user information. The distributor, or User Distribution Server (UDS) comprises a plurality of user identifiers per subscriber basis that are intended for identifying a user under different service environments. The UDS responds to a query pertaining to a specific user by redirecting the query to the appropriate server or serving entity, in a network having multiple servers. It is to be understood that "redirecting" in this context means answering the query with a server identifier, for the requester node issuing a new query towards the server. The UDS implements a secondary database with user and server identification information obtained from primary user databases, and is arranged for determining a specific network server in charge of a given user under a particular service environment. These specific network servers are considered primary databases wherein subscribers, or more specifically, user data under particular service environment, are distributed. Thus, the

> UDS acts as a secondary database comprising means for recovering user identifiers and necessary service data from the specific network servers acting as primary databases as well as from other UDS in the network resolution domain. The UDS also comprise storage for user identifiers and necessary service data, if any, per specific network server.
>
> (Sanchez, pages 1-2, paragraph 11).

While Sanchez describes that a plurality of user identifiers for identifying a user under different service environments is downloaded to Sanchez' Distribution Server (UDS), nothing in the above paragraph, or elsewhere in Sanchez, describe that handling instructions for the various identifiers in the plurality of user identifiers are independently assigned or are associated with different handling instructions.

Accordingly, contrary to the Examiner's contentions, Sanchez fails to disclose or suggest at least the features of "further comprising indicating and assigning handling instructions for at least one contact address independently during registration of the at least one contact address," as recited in Appellants' claim 8, and Rosenberg fails to cure the deficiencies of Sanchez as they relate to the teachings of this feature.

Because none of the references discloses or suggests, alone or in combination, at least the features of "further comprising indicating and assigning handling instructions for at least one contact address independently during registration of the at least one contact address," Appellants' claim 8 is allowable over the cited art, and the Examiner's rejection under 35 U.S.C. §103(a) of this claim should be withdrawn.

Appellants' claim 9 depends from claim 8 and is therefore allowable over the cited art for at least reasons similar to those provided with respect to claim 8, and the Examiner's rejection of claim 9 under 35 U.S.C. §103(a) should be withdrawn.

CONCLUDING REMARKS

For the foregoing reasons, as well as the reasons provided in Appellants' Pre-Appeal Brief Request for Review, dated February 9, 2011, Appellants submit that claims 1, 4-5, 7-9, 11, 20, 23, and 26-32 are allowable. Therefore, the Examiner erred in rejecting Appellants' claims and should be reversed.

Respectfully submitted,

Dated: June 17, 2011

/Ido Rabinovitch/
Ido Rabinovitch
Reg. No. L0080
Attorney for Appellants

Customer No. 64046
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
701 Pennsylvania Ave., NW, Suite 900
Washington, DC 20004
Telephone: 202-434-7434
Facsimile: 202-434-7400

(viii) Claims Appendix

1. A method, comprising:

registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user;

receiving, at the controller entity, a request for a communication link to the user;

querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request; and

processing, at the controller entity, the request based on the queried information from the database, wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially.

2.-3. (Cancelled)

4. The method as claimed claim 1, wherein the registering comprises registering the plurality of contact addresses for the user in the controller entity which is provided in association with a multimedia network.

5. The method as claimed in claim 1, wherein the registering comprises the user registering the plurality of contact addresses in at least two different communication networks.

6. (Cancelled)

7. The method as claimed in claim 1, wherein the querying comprises applying a query to a sub-group of known contact addresses.

8. The method as claimed claim 1, further comprising indicating and assigning handling instructions for at least one contact address independently during registration of the at least one contact address.

9. The method as claimed in claim 8, wherein the indicating and assigning comprises indicating and handling the handling instructions for the at least one contact address by either the user or the database.

10. (Canceled)

11. An apparatus, comprising:

at least one processor; and

at least one memory, wherein the at least one processor and the at least one memory provide operations comprising:

registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user;

receiving, at the controller entity, a request for a communication link to the user;

querying, by the controller entity, a database at a home subscriber server for information regarding a manner regarding how to handle the request; and

processing, at the controller entity, the request based on the queried information from the database, wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially.

12.-19. (Cancelled)

20. An apparatus comprising:

registration means for registering, in a controller entity comprising a call state control function, a plurality of contact addresses for a user;

interface means, at a controller entity, for interfacing to a database for storing information regarding how to handle a request for the user;

querying means for querying, by the controller entity, the database at a home subscriber server for information regarding a manner regarding how to handle the request; and

processing means for processing, at the controller entity, the request based on the queried information from the database, wherein, when provided during registration, the controller entity uses user preference information to determine whether to fork the request in parallel or sequentially.

21.-25. (Canceled)

26. The apparatus as claimed claim 11, wherein the apparatus is provided in association with a multimedia network.

27. The apparatus as claimed in claim 11, wherein the registering is configured to register the plurality of contact addresses in at least two different communication networks.

28. The apparatus as claimed in claim 11, wherein the querying applies a query to a sub-group of known contact addresses.

29. The apparatus as claimed claim 11, further comprising receiving handling instructions for at least one contact address during registration of the at least one contact address.

30. The apparatus as claimed in claim 29, wherein the handling instructions are received from at least one of the user or the database.

31. The method of claim 1, wherein the request comprises a session initiation protocol request.

32. The method of claim 1, wherein the call state control function is a serving call state control function.

(ix) Evidence Appendix

None

(x) Related Proceedings Appendix

None

5425745v.1